Brown and Caldwell Carson City, Nevada BORING LOG

Project Name: OU4 Phase 1 - Yerington Mine Evaporation Ponds Project Number: 136742												
Soil Boring: Monitoring Well: Piezometer: Boring/Well Nan								J4-LEF	•	Sheet <u>1</u> of <u>2</u>		
Boring Location: OU4 Lined Evaporation Ponds							Northing: 1557028.33			Easting: 321701.15		
Drilling Contractor: WDC							Top of PVC Elevation: Ground Surface Elevation: 4358.22 feet amsl					
Drilling Equipment:Geoprobe							Date Started: 10-05-08 Date Finished: 10-05-08					
Drilling Method: Direct-Push							Completed Water Depth: 30 ft bgs Depth: 22.5 ft bgs					
Sampling Method: Continuous Core Driller: Rick Smedley							WELL CONSTRUCTION					
Well Seal: N/A Borehole Diameter:2"							Type and Diameter of Well Casing: N/A					
Logged By: P. Bassett Drilling Fluid: N/A						Slot Size: N/A Filter Material: Cement grout						
Depth (ft)	Elevation (famsl)	USCS Group Symbol	Material Description	Sample Tyre I Name	Sample Type II ocation	Sample Type II Name	Sample Type II Location	Lithology	Remarks			
-	-	ML J GW	SILT (Pond Sediments) (0 - 0.25) Moist, yellow. Pond Sediments are topped with a hard evaporite crust and soft evaporite crystals were evident below the crust. Pond sediments become saturated with depth. GRAVEL with sand and silt (VLT Subbase) (0.25 - 1.5)						Description of drilled cuttings based on ASTM Method D-2488 (the visual-manual procedure), grain-size determinations and nomenclature based on the Unified Soil Classification			
5-	4355 —	SP	VLT Subbase is 3/4"-minus crushed rock. Overlaid by a thin, asphalt liner. Saturated. Poorly-graded SAND with silt (Native Soil) (1.5 - 7) Slight reddish, moist. Soil forms clumps and contains some thin layers of dense, plastic clay. Sand is poorly-graded. Sample: OU4-LEP-01A-SC from 1.5-7 feet. Sample: OU4-LEP-01A-MW from 1.5-15 feet. Composite sample from 3 boreholes spaced 6 inches apart.	JSTW-GJ FFILO					based on the Unified Soil Classification System. Horizontal Survey data is expressed in the Nevada State Plane system, Nevada West zone, in feet. Sharp contacts indicated by solid lines, gradational contacts indicated by dashed line All depths are below land surface unless state otherwise. Type 1 Samples are representative of geochemical and geotechnical soil samples as well as groundwater samples. Type 2 Samples are representative of meteor water mobility soil samples.	rvey data is expressed in the Plane system, Nevada West s indicated by solid lines, intacts indicated by dashed line. below land surface unless stated es are representative of and geotechnical soil samples undwater samples.		
	4350 —	SM	SAND (7 - 10) Sample: OU4-LEP-01A-SG from 7-10 feet.	OIMJEDONASG		OU4-LEP-01A-MW						
-	- - - 4345 —	SM/ML	Silty SAND / SILT (10 - 15)									

Carson City, Nevada

BORING LOG

Project Number: __136742 Project Name: OU4 Phase 1 - Yerington Mine Evaporation Ponds Sheet <u>2</u> of <u>2</u> Boring/Well Name: OU4-LEP-01 Monitoring Well: Piezometer: Soil Boring: X Sample Type I Location
Sample Type II Name **USCS Group Symbol** Sample Type I Name Elevation (famsl) Depth (ft) Material Description Remarks SAND (15 - 18)
Medium-grained and poorly graded sand. SP Sample: OU4-LEP-01B-SC from 15-18 feet. OU4-LEP-01B-SC Well-graded SAND with silt (18 - 20) 4340 SW Sand is well-graded. OU4-LEP-01B-SG Sample: OU4-LEP-01BSG from 18 to 20 feet. 20 Silty SAND (20 - 30) SM Sample: OU-4-LEP-01-GW from 26-30 feet. 4335 25 OU4-LEP-01-GW 4330 30-Bottom of Borehole at 30 feet below ground surface. 4325